



Waterco Case Study

Hilton Brown Swimming (New Zealand)

Increase lifespan of pool filter media Hilton Brown Swimming (New Zealand)

“ We’ve always been impressed with Waterco’s high-quality commercial range, their level of service, and their price range. ”

says Matt Pickford,
Project Engineer, pool builder H2O Engineering

Setting: New Zealand’s leading swim school founded by Commonwealth Games Gold medallist

Hilton Brown Swimming was founded in 1973 by Hilton Brown, a former competitive swimmer who represented New Zealand at the

- LOW-CHLORINE FILTRATION SYSTEM FOR LEARN-TO-SWIM SCHOOL IN NEW ZEALAND
- WATERCO’S NOZZLE PLATE FILTERS INCREASE LIFESPAN OF FILTER MEDIA
- AIR SCOURING REDUCES BACKWASHING AND WATER CONSUMPTION

Commonwealth Games in Jamaica in 1966. There he enjoyed success in the 220-yard backstroke and earned a Bronze medal in the medley relay.

Starting with a learn-to-swim program in Auckland, Hilton Brown

Swimming now operates seven swim schools throughout the upper North Island. The latest is Hilton Brown Hobsonville, a state-of-the-art facility which includes a fully heated, 20-metre pool purpose-built for teaching people how to swim.

Challenge: Maintaining healthy, hygienic pool water - and brand reputation

Poorly filtered and sanitised pool water can lead to serious health concerns, such as skin infections, eye irritations, and respiratory difficulties. And for an established and respected brand like Hilton Brown Swimming, unhygienic pool water can undermine decades of goodwill and hard work.

“While this new facility doesn’t have massive bather loads - they’re growing all of the time - their goal is to provide high-quality water for their swim staff and students,” says Project Engineer Matt Pickford from pool builder **H2O Engineering**. “Hilton Brown Swimming is not only committed to providing quality learn-to-swim programs but also creating a healthy environment for everyone.”

Managing costs - power, water and chemicals - was also a key consideration when choosing the appropriate water filtration solutions.



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Solution: Air scouring filters from backwash and removing coagulated material from filter media

To help the Wapotec pool water treatment system remove contamination from the water and get the most out of the filtration plant, Matt says **Waterco’s Commercial Fibreglass Nozzle Plate Filters** ensure uniform flow for both filtering and backwashing. This guarantees maximum performance through the media bed.

The nozzle plate system introduces pressurised air directly into the bottom of the filter media. This provides vigorous agitation and filter media expansion required for an effective air/water backwash, leading to reduced backwashing times and water consumption. This saves up to 25 per cent of backwash water.

“You really need nozzle plate filters, so you can air scour the filters from backwash and remove all the coagulated material from the filter media,” Matt explains. “That is a very important part of the process for long-term reliability and performance.”

Normally with any strong coagulant, such as aluminium sulphate or polyaluminium chloride, filter media only lasts about 12-18 months if you don’t use an air scourer on the filters.

“Whereas with nozzle plate filters, you introduce air every time you backwash to break up the media and release all of the congealed material



Waterco has developed a new method of fabricating a nozzle plate filter, which practically eliminates failure rates experienced in most other nozzle plate filters.



Waterco's revolutionary winding technology further strengthens the fiberglass filter tank, some models can withstand a working pressure of up to 1,000 kPa (150psi).



Filament winding ►



With the pool currently operating at .8-.85 free chlorine and almost zero chlorine combined - at 32 degrees - there is virtually no chlorine or chemical odours. A positive feedback from the teaching staff, they haven't had any eye or ear irritations despite being in the water for 3-4 hours.

into the backwash," he says. "We've got Waterco Nozzle Plate Filters on another council complex with three pools - which does get a hammering - and they have been producing really good water quality for around three years."

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"We've always been impressed with Waterco's high-quality commercial range, their level of service, and their price range, which together make it a very appealing product to recommend and install," says Matt.

Conclusion: Clean, hygienic pool water that feels good on the skin

Since installing the system in April 2018, the facility has received positive feedback from its teaching staff.

"They haven't had any eye or ear irritations," he says. "In fact, they've said they feel the same getting out of the pool as when they got in, despite being in the water for 3-4 hours."

www.waterco.com

www.h2oengineering.co.nz

www.swim.school.nz